

*Geomagnetism.*—The group stresses the importance of a geomagnetic survey of the permanent field in the Antarctic area (continent and southern seas).

*Cosmic rays.*—Work in cosmic rays and other specialized fields for which the Antarctic offers opportunities for throwing light on basic problems should be encouraged.

*Atmospheric nuclear.*—Radiation stations engaged in measuring the radioactivity of air and precipitation should carry that work on as far as possible after the IGY. Other stations are invited to initiate such a program.

*Rockets.*—Rocket sounding program should be enlarged to cover the winter season, measuring temperatures and winds up to 80 kilometers at the rate of one per week.

#### (c) Networks

Considering the subject from a scientific viewpoint, the working group arrived at the following recommendations:

*Meteorology.*—The Working Group I recommends that the countries participating in Antarctic research establish nationally, or through collaboration between two or more countries, the meteorological network necessary for the implementation of the synoptic program.

*On the coast.*—In addition to the 14 IGY coastal stations, 7 stations located in the following regions:

1. One station between Halley and Dumont d'Urville.
2. One station between Dumont d'Urville and Wilkes.
3. East of the Weddell Sea (if Halley Bay is abandoned).
4. Southwest of the Weddell Sea.
5. Three stations between the Palmer Peninsula and the Ross Sea.

*Island stations.*—Particularly Peter the First Island, Bouvet, Heard, etc.

*In the interior.*—In addition to the 8 inland stations (including Sovetskaya), 5 stations located in the following regions:

Longitude	Latitude
0°	80° S.
30° E.	75° S.
60° E.	75° S.
130° E.	75° S.
90° W.	80° S.

The working group urges the participating countries to increase the number of ozone stations.

*Oceanography.*—All expeditionary ships should participate in the oceanographic program.

The importance of winter observations should be stressed.

*Cosmical physics.*—The minimum network requirements for ionospheric and auroral physics and for geomagnetism are mentioned in paragraph 1. However, all stations presently equipped and which plan to continue their operations after the IGY should be invited to make full use, as far as possible, of their established equipment.

*Weather control in the Antarctic.*—A weather central for Antarctica should be maintained in the Southern Hemisphere. The problem of the location should be studied by the interested countries.

#### 3.2.2 Report of SCAR Working Group II: Geology, glaciology, morphology, cartography

(a) Geology should be part of all permanent programs. In addition to the classical studies in structure, stratigraphy, and related fields, special attention should be directed to—

1. The terrain beneath the ice as revealed by seismic studies.
2. Postglacial and/or quaternary geology at coastal stations.
3. Paleoclimatic studies.
4. Palaeomagnetic studies.
5. Submarine geology.

(b) Glaciological studies should include—

1. Thickness, structure, and volume of inland ice as revealed in seismic findings. Such seismic sounding should be made so as to reveal the maximum amount of information about the bedrock beneath the ice.
2. Bedrock observations at all stations.
3. Annual stratification of snow to establish climatologically significant precipitation records.